

AMENDMENT AF
Patent Application Serial No. 10/695,154

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AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1 (currently amended): A tube support structure for use within an array of heat exchanger tubes, each tube having a diameter and a longitudinal axis, the tube support structure comprising:

a tube support bar for use between a pair of heat exchanger tubes, the support bar comprised of a first metallic strip attached to a second metallic strip at spaced intervals, the first strip having a coefficient of thermal expansion greater than the second strip, wherein the first strip is attached to the second strip at spaced intervals in a direction transverse to the length of the second strip, and wherein the first strip is attached to the second strip at spaced intervals of about 2 tube diameters

Claim 2 (original): The tube support structure of Claim 1, wherein the first and second strips are flat at a first temperature, and wherein the first strip becomes convex at a temperature higher than the first temperature.

Claim 3 (original): The tube support structure of Claim 1, wherein the first strip is thinner than the second strip.

Claim 4 (original): The tube support structure of Claim 3, wherein the first strip is 0.02 inches thick and the second strip is 0.08 inches thick.

Claim 5 (original): The tube support structure of Claim 1, wherein the first strip is attached to the second strip via spot welding.

Claim 6 (cancelled)

Claim 7 (cancelled)

Claim 8 (currently amended): The tube support structure of Claim 1 [[7]], wherein the tube diameter is about 0.5 inches and the first strip is attached to the second strip at

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spaced intervals of about 1 inch.

Claim 9 (original): The tube support structure of Claim 1, wherein the first strip is made of SB-166 1690 and the second strip is made of SA 240 type 410S.

Claim 10 (previously amended): The tube support structure of Claim 1, wherein said tube support structure is operational at a temperature of about 550 degrees F.

Claim 11 (original): The tube support structure of Claim 1, wherein the tube support bar is a low-bar of a lattice tube support bar array.

Claim 12 (original): The tube support structure of Claim 1, wherein the tube support bar is a high-bar of a lattice tube support bar array.

Claim 13 (currently amended): A tube support structure for use within an array of heat exchanger tubes, each tube having a diameter and a longitudinal axis, the tube support structure comprising:

a tube support bar for use between a pair of heat exchanger tubes, the support bar comprised of a first metallic strip attached to a second metallic strip at spaced intervals, the first strip having a coefficient of thermal expansion greater than the second strip,

~~The tube support structure of Claim 1, further comprising~~ a third metallic strip attached to the second metallic strip opposite the first metallic strip at spaced intervals, the third strip having a coefficient of thermal expansion greater than the second strip.

Claim 14 (original): A support for heat transfer tubes in a steam generator, the support comprising:

a plurality of bars installed between the heat transfer tubes so that a gap exists between the bars and the heat transfer tubes;

a spring means welded to at least one of the bars at intervals, the spring means having a thinner thickness than the bar; and

wherein the spring means and the bar have different thermal expansion coefficients so that at a non-operating temperature of the steam generator the spring means does not contact the adjacent tube and at the operating temperature of the steam generator the spring means contacts the adjacent heat transfer tube.